



**CDS Connect Work Group
Meeting Summary
August 30, 2018
3:00-4:30 PM EST**

Attendees

AHRQ Sponsors	Ed Lomotan, Shafa Al-Showk, Robert McNellis
Work Group Members	Apurva Desai, Barry Blumenfeld, Bijal Shah, Blackford Middleton, Chris Shanahan, Maria Michaels, Daniel Seltzer, Dwayne Hoelscher, Edna Boone, Frank Sonnenberg, Jeremy Michel, Jody Platt, Josh Richardson, Marc Sainvil, Marlece Watson, Michael Wittie, Mike Dorsch, Nedra Garrett, Noam Arzt, Preston Lee, Randolph Barrows, Ronilda Lacson, Ryan Mullins, Stephen Loureiro, Steve Hasley, Vojtech Huser
MITRE CDS Connect Project Members	Ginny Meadows, Chris Moesel, David Winters, Dylan Mahalingham, Julia Afeltra, Kevin Hennessy, Noranda Brown, Sharon Sebastian

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Agenda

- Welcome and brief review of meeting objectives and the agenda
- Trust Framework Workgroup (TFWG) Final Whitepaper Overview: Promoting Trust in CDS Connect Artifacts
- Sharing "Lessons Learned" on the CDS Connect Repository
- Pilot Update
- Status update on the Pain Management Summary CDS artifact and software
- Closing

Action Items

None

Meeting Summary

Welcome

MITRE started the meeting by welcoming participants and reviewing the names of work group members participating in the call. Maria Michaels then reviewed the agenda and facilitated the rest of the discussion.

Overall:

The meeting included a presentation from the Trust Framework Work Group (TFWG) on the final results of their work on promoting trust in CDS Connect artifacts, along with a presentation and discussion on best methods to share CDS implementation “lessons learned” details. In addition, updates on the current pilot along with an overview of the pilot focus group findings, lessons learned, and future recommendations were provided, and information about when the Pain Management Summary artifact and associated software may be published. During each presentation, work group member ideas, suggestions and concerns were encouraged.

White Paper Overview: Promoting Trust in CDS Connect Artifacts, Blackford Middleton, Patient Centered Outcomes Research CDS-Learning Network (PCOR CDS-LN)

Blackford Middleton provided an overview of the white paper produced from the work done by the TFWG:

- a. Blackford provided a brief background on why trust is needed for CDS. He also reviewed the TFWG charter: to consider issues of trust for knowledge artifacts and produce a framework that recommends strategies for promoting trust in knowledge artifacts in four areas: legal, marketplace, policy and governance. Specific deliverables included: identifying use cases as well as barriers to the use cases where trust is evaluated and expected regarding knowledge artifacts for patient-centered CDS (PC-CDS); and to produce a white paper to recommend approaches for transparent, fair and equitable exchange of knowledge artifacts.
- b. An overview of the scenarios and methods used in developing recommendations was provided. Blackford reviewed and discussed the results, which were developed into nine key groups of attributes, each with specific recommendations.
- c. Blackford invited questions or additional comments from the work group members:
 - i. A work group member asked if there would be additional work on security-related policies. When asked about what he thought the needs were in this area, he further explained that he was referring to issues like release of consent, the ability of knowledge artifacts to “break the glass”, and if it is assumed that the CDS is operating in a trusted environment where they have access to all the data?
 1. AHRQ and the CDS Connect project team will be reviewing the final white paper and determining how to operationalize the recommendations. Any additional work is not planned for security-related policies.
 - ii. A work group member asked whether usability and ease of implementation were considered as a trust factor. She referred to the learnings from the electronic clinical quality measure (eCQM) work in this area. She mentioned that the Office of the National Coordinator’s (ONC) JIRA site has an area specifically for logging CDS issues.

1. Blackford Middleton commented that direct input from the electronic health record (EHR) to provide feedback on usability may also be needed. Jody Platt suggested that some of this is addressed in the discoverability and accessibility elements.

Sharing Lessons Learned, Sharon Sebastian (MITRE)

Sharon Sebastian provided information on the current methods in the Repository for sharing lessons learned from CDS artifact development and implementation. This includes metadata fields for Pilot Experience and Cautions where free text can be added, as well as the ability to attach technical and miscellaneous files. The team would like to improve upon this moving forward and convened a small work group to discuss potential improvements. One idea was to have 3 prompts to ask these questions:

- What was the biggest takeaway?
- What went well?
- What didn't go well?

Sharon invited comments from the work group members.

- a. Maria Michaels suggested an additional question – “What would you do differently?”.
- b. A work group member suggested that since alert fatigue is a big issue, asking if they experienced any difference in the response to the alerts as time passed.
- c. Another work group member suggested adding a more directed usability question, such as “How did you react when you saw this question. Was it useful? Was it immediately obvious how you should react?”.

Sharon asked if the prompts needed to be more succinct?

- d. A member commented that different levels may be needed, depending on the amount of time and detail someone is able to provide.
- e. Ed Lomotan (AHRQ) suggested that it is not just sharing lessons learned, but also documenting and making discoverable choices made during development of the CDS. This may need to be at both a high level and then more detailed in the different attached documents. He recommended determining how to make sure these are discoverable.
- f. Sharon commented that there are currently fields in the repository to indicate how the implementer interpreted the recommendation statement or guideline as well as decision points and rationales.
- g. A work group member asked who will curate the data contributed. Sharon confirmed that currently, anything the contributor adds is reviewed by the CDS Connect team prior to publishing the content. Another member commented that his organization has their own internal process to do this as well.

Sharon shared one additional slide, mentioning that it is up to the contributor to decide what to share with varied levels of detail. Additional information that may be considered might consist of the types of staff, their skill set, level of effort, and when they were needed during the pilot process.

- h. Maria Michaels has a team working on similar information and will share the details.
- i. Ed Lomotan suggested a more automated process, such as using an API to upload a template.

Status of Pilot, Ginny Meadows (MITRE)

Ginny Meadows provided an update on pilot activities. The pilot officially ended on 8/20/2018. Tasks completed since the update in July include the pilot focus group meeting, and the final analytics reports.

- a. Ginny provided an overview of the focus group findings. The pilot site clinicians generally found the Pain Management Summary app useful, found the User Interface “simple and intuitive”, and agreed that it helped inform their decision-making process. They described their prior manual process as “clunky”, with a typical workflow consisting of accessing the prescription drug monitoring program (PDMP), and then going to the EHR and tabbing through the patient encounters, medications, labs and other treatments screens. The primary barriers reported included a lag in the app display time and inconsistent display of the morphine milligram equivalents (MME), urine drug screen results, and non-pharmacologic treatments. Recommendations for new features included integration with the California PDMP as well as integration with “medMatch”, a Quest lab capability that helps clinicians compare urine drug screen results with the medications the patient is taking.
- b. Lessons learned with future recommendations were also discussed. The first issue identified was not having direct access to testing or production pilot systems, making debugging and performance testing very difficult. In future pilot efforts, access to testing environments (even if supervised) would make integration more efficient. If not feasible, then additional methods to support debugging and performance testing should be explored for each pilot site. In addition, consideration of any limitations in EHR-support of Fast Healthcare Interoperability Resources (FHIR) concepts need to be evaluated and mitigated if possible early in the pilot process, as well as early engagement of pilot team members.

Publishing CDS Connect Resources, Sharon Sebastian (MITRE)

Sharon Sebastian reviewed the plans to publish the Pain Management Summary artifact, the Substitutable Medical Apps, Reusable Technology (SMART) on FHIR app, and the Clinical Quality Language (CQL) Services prototype tool, with a target date of September 11th.

Open Discussion and Closeout

Shafa Al-Showk (AHRQ) and Maria Michaels provided a brief update on the CDS Connect presentation that they gave at the Public Health Informatics Conference on August 22. Ginny Meadows (MITRE) and Ed Lomotan (AHRQ) announced that the work group would not be meeting in September, but would resume for the new contract year in October, and thanked the work group members for their participation. The meeting closed at 4:30 pm.